was underneath the ruins, cry out three times, 'I'm dying fast—I am nearly done for.'

"James Sims—I am a builder, residing in Traffic-street, and engaged to build an arch over the Mill Fleam in the Morledge, and had got one length of arching in, which was completed on Friday night. It remained for the purpose of settling, with the centres under, until yesterday morning. I considered that the centres might then be safely struck. On Monday night I received orders from Mr. Harpur to strike the centres; and yesterday morning my son-in-law, Thomas Walker, and Charles Bagguley were employed for that purpose. I superintended the work, and both Mr. Harpur and myself had been present from the first blow being struck. Mr. Harpur, who is the town surveyor, was appointed to superintend the work, and see that my work was done according to contract. From the commencement of the work he attended daily, sometimes four or five times a day, and at times half a day together. I considered I worked under his direction. We worked by plans and specificatinns, to which we strictly adhered, unless requested by Mr. Harpur to deviate from them. I meant trying one length of centres first to see what I could do with it, and to ascertain whether I should require any more. I was under the arch not more than half a minute before it fell in, and I did not observe any indication of danger. The first notice of this accident I had was the crash and falling in of the arch.

"After the examination of Mr. Samuel Harpur, surveyor to the Commissioners under the Derby Improvement Act, the jury retired to consider their verdict. In about five minutes they returned, and delivered in a verdict of "Accidental death," with a deodend of 1s. upon the centre of the arch, the expression of a regret that two centres were not employed instead of one, in order that the work might have had more time to set, and a recommendation that in future all such works should be carried on with not less than two centres."

So that whether from the building, the scaffold, or the temporary centering, a large sacrifice of human life is doomed to occur, and the same to be again, and again, and again repeated.

Now, such accidents often occur to Norman arches, circular segmental arches, and elliptical arches; but such accidents were hardly ever heard of as occurring to pointed arches of proper construction.

But the fancy for building chimneys which shall rival in altitude the most celebrated cathedral-spires, has of late filled the public journals; and the fall of such "*stalks*," as the Scotchmen call them, forms almost as frequent an article of information as their building. We began with one of the comparatively moderate altitude of 160 feet, which nevertheless fell, as appears by the following account:—

"Millbrook.—On Wednesday night the upper part of one of the chimneys at Mr. Gill's Alkali Works fell, but from its having been erected in the centre of a field, no injury was occasioned beyond the inconvenience sustained at the works in consequence of the accident. The chimney, which, we believe, was 160 feet high, has from the time of its erection gradually sloped in the direction of the south, and for some time past the inclination of the top has been no less than three feet beyond the base, the attraction of cohesion merely enabling it to withstand the "rude winds" with which we have lately been visited. The overtopping height having fallen, the inclination of the other portion is considerably lessened, but it will be necessary to remove much of what still remains before the chimney can be raised to its former elevation."

Then we have an account of the fall of another chimney of about the same altitude described in the following passage:—

Fall of Another Chimney.—Two Men Killed.—Tuesday, about noon, a most lamentable accident occurred at the Churchgate factory, Stockport, belonging to Messrs. Elkanah and Samuel Howard Cheetham, by the falling of a large chimney attached to the works there, and which, in its decent, unfortunately caused the death of two men and seriously injured two or three others. The chimney stood in the yard behind the Churchgate factory, as seen from the public road. It and the surrounding buildings have probably been built between 40 and 50 years. It was originally perhaps about 40 yards high, square built, with a base of unusually large dimensions, which rested, we believe, upon arches and pillars of brickwork. Up each of these pillars ran a flue, and the chimney was divided down the centre by a partitioning of brickwork. We have also been informed that there were two small rooms at the base of the chimney. From what has already been said, it will be seen that this chimney was one of very old construction, and from its great age it had long been in a very dilapidated state. We should state, that on the north it was bounded by a declivity, leading to the Lower Carrs, and the projecting end of a building; on the east of the factory, which joined its base; on the south by another end of the factory; and on the west by two small reservoirs—walled round, and divided by a wall in the centre. Close by the base of the chimney was a boiler-house and boiler, at work at the time.

"On Monday, we believe, near a cart-load of bricks fell from the top on to the roof of a turning shop and factory below, in consequence of which the hands refused to work, and the engine was stopped. Yesterday morning it was determined to take it down, and several men were engaged for this purpose from an early hour. About noon, the time in question, they had probably taken down about five yards of it, and most of the men and factory hands had left for dinner, when the whole mass suddenly fell, in a south-westerly direction, carrying down the boiler-house, and almost entirely filling with bricks, timber, and rubbish, the yard and smaller reservoir. A sweeper, named Joseph Smith, aged about 40 years, was at the top of the chimney at the time, engaged in the work. Finding it going, he leaped off, but was followed by the mass of brickwork, and thrown with tremendous violence into the water at one corner of the reservoir, a great weight of bricks falling upon him. He was extracted from his situation as soon as possible, but remained insensible for a long time afterwards; indeed, it was understood that he was very much injured about his head, chest, and shoulders. The other two men, who were killed, were found under the brickwork quite dead."—*Manchester Guardian.*

Then our sympathies towards tottering chimneys are called forth by the

"Fall of a High Chimney at Ardwick.—The chimney of the chemical works of Messrs. Tennants, Clow, and Co., at Ardwick-bridge, having for some time past shewn a leaning to one side, it had been determined to take it down, when the late high south-easterly winds came, and during the night of Friday last affected it so much, that on the men coming to work on Saturday morning at six o'clock, its fall was dreaded every moment. It was found that at about 3 feet only from the ground it was completely cracked across, so that it was in imminent danger of falling with the next gust of wind. No time was lost; Mr. Statham, one of the partners, was soon on the spot, and was joined shortly afterwards by Mr. Young, the manager of the works; and the inmates of a number of cottages all round the chimney and within its falling range, were promptly awakened and removed, with their furniture and moveables, to places of safety. The horses were also removed from the adjacent stables, and all the workmen were strictly enjoined not to approach that part of the premises. All these precautionary arrangements having been completed with great care and promptitude, about nine o'clock the chimney at length fell with a tremendous crash, breaking through several buildings, all the inmates of which had been removed, and crushing the arches over the river which had been erected for the purposes of the works. On the whole, damage was thus sustained to the extent of 1,000*l.*; but fortunately, though one individual had a very narrow escape, no lives were lost; a result mainly attributable to the excellent precautions taken by Mr. Statham and Mr. Young. This chimney, it is stated, was built about thirteen years ago, when the works were in the occupation of Mr. E. P. Thompson. Its form was polygonal, its height between 40 and 50 yards."

And we must not forget that when Birkenhead and its neighbourhood suffered from a storm on Friday week last, about 80 feet of a wall 30 feet high, forming a portion of the market now erecting, was blown down, and three workmen were much injured.

The accident at Oldham described in our last number, which arose from a violation of one of the commonest and best-known principles of the strength of materials, and the fall of the 240-ft. chimney at St. Rollox, we must enumerate in our catalogue of disasters—nor must we altogether overlook that at Ipswich; and after quoting all these instances, so many of them attended with very great loss of property, and some of them with most serious loss of life, we think no one can doubt that a power is required to be created, which shall restrain building within the limits of prudence, for it seems evident the construction of chimneys of two, three, or four hundred feet high, and some of them more, is not upon every occasion in competent hands; and even in the matter of floorings, the case at Oldham is but one of a multitude of such violations of prudence and constructive principles.

It is manifest that a police is required to protect life and property from the effects of the recklessness or the ignorance of those who, unqualified for the task, are rash enough nevertheless to enter upon such works.

At another occasion we shall return to this important subject.

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CANDIDATES FOR THE NINE NEW MIDDLESEX DISTRICT-SURVEYORSHIPS, ADMITTED BY THE MAGISTRATES.

(*Election to take place on the 28th instant.*)

For Fulham.

1. Mr. Henry Harrison.
2. — Andrew Horseley.
3. — Augustus Abraham Winterbottom.

For Hammersmith.

4. Mr. Samuel Beazeley.
5. — Samuel Charles Christopher.
6. — Frederick Claudius J. Parkinson.
7. — Martin Joseph Stutely.

For South Kensington.

8. Mr. Thomas Leverton Donaldson.
9. — John Blore.

For North Kensington.

10. Mr. Charles Beachcroft.
11. — George Godwin, Junr.

For Hampstead.

12. Mr. Henry Edward Kendall, Jun.
13. — Thomas Bird.

For Hornsey.

14. Mr. Alfred Bartholomew.
15. — James Harrison.

For Tottenham.

16. Mr. John Henry Taylor.

For Stoke-Newington.

17. Mr. William Frederick East.
18. — William Lovell, Jun.
19. — James Moon.

For Bromley.

20. Mr. John Blyth.
21. — Henry John Hammon.
22. — John Morris.
23. — George Henry Simmonds.

Large Oak.—The dimensions of the trunk of an oak tree, growing in Yanwath Woods, near Lowther, taken a few days ago by Mr. Walls, principal woodman to Mr. Richardson, of Castle Eden, timber-merchant, were as follows:—Circumference, 20 feet; length of bole 3 feet; giving a content of 75 cubic feet; and as a cubic foot of dry oak weighs something more than four stones, the weight of timber may be computed at about two tons.—*Westmoreland Gazette.*

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